PLATE VI.

Fig. 1. Third prosomatic appendage of *Tachypleus gigas*, ♂.
Fig. 2. Abnormal clasper of *Tachypleus tridentatus*, ♂, retaining the distal extremity of the immovable finger and illustrating the formation of the hemichelate from the chelate condition.
Fig 3. Third prosomatic appendage of *Carcinoscorpius rotundicauda*.
Fig. 4. Sixth appendage of *Tachypleus gigas*, with spur (*sp.*) on fourth segment.
Fig. 5. Ditto of *Carcinoscorpius rotundicauda*, showing absence of spur.
Fig. 6. Endopodite of branchial appendage of *T. gigas*, showing the sensory organs and absence of spine on penultimate segment.
Fig. 7. Inner edge of last and penultimate segments of endopodite of branchial appendage of *Xiphosura polyphemus*, showing spine (*sp.*).

N.B.—In the Quart. Journ. Micr. Sci. vol. xliv. p. 298 (1901), I drew attention to the presence on the four posterior pairs of prosomatic appendages in *Limulus* of a suture marking the original division of the fourth segment into two, thus bringing the number of leg-segments in Scorpions and *Limulus* into exact agreement. My regret at having overlooked the fact that M. Laurie (Journ. Linn. Soc., Zool. xxv. p. 37, 1894) mentioned the same feature is lessened by the recognition of the value that attaches to the independence of the testimony. The credit of the discovery of this suture belongs apparently to Ranzani (Opusc. Sci. Bologna, ii. p. 279, pl. viii. figs. 2, 7, & 8, 1818), as stated by Van der Hoeven. The latter, however, omits the sutures from his plates.

XLIII.—*On the Geographical Races of the Kinkajou.*

By OLDFIELD THOMAS.

THE Kinkajou (*Potos flavus*, as Mr. Palmer has shown its name to be, better known as *Cercoleptes caudivolvulus*) is spread over Central and Northern South America from Mexico to Ecuador on the west and Guiana on the east; but the specimens from these different regions are not all precisely alike, and a comparison shows that five definable subspecies may be readily distinguished. These may be briefly indicated as follows, more detailed descriptions of the new forms being subjoined:—

1. *Potos flavus aztecus*, subsp. n.

General colour greyer; between "tawny olive" and "clay-colour" of Ridgway. No dorsal streak.
Mexico and Guatemala.

2. *Potos f. megalotus*, Mart.

General colour deeper and stronger, about raw sienna of Ridgway. A dorsal streak usually present.
Costa Rica and Colombia.

3. *Potos flavus*, Schreb. (typical).

Colour as in *aztecus*. A well-marked dorsal streak.
Guiana.

4. *Potos f. meridensis*, subsp. n.

Colour and streak as in *flavus*, but size smaller.
Merida, Venezuela.

5. *Potos f. modestus*, subsp. n.

Size very small and tail short. Colour rather darker than in *flavus*. Dorsal streak present.
W. Ecuador.

The original "*Lemur flavus*" of Schreber * ex Pennant's "Yellow Maucaco" was said to have come from Jamaica, but may be safely assigned to the "*caudivolvulus*" † of the same author from Surinam, with which its description closely agrees, and this may therefore be treated as the type locality for both.

It is difficult to know how to deal with Martin's *Cercoleptes megalotus* and *brachyotus* ‡, described from menagerie specimens without localities, and the characters used being mainly due, according to Gray, to the "artifice of the preserver." *C. brachyotus* certainly cannot be identified with any of the races above enumerated, although it is possible that there may really exist a much shorter-eared form than the usual one, for two specimens in the Museum, one from "Central America" and the other (without skull) from N. Ecuador, have much shorter ears than other specimens; but I am not satisfied in either case that the difference is natural. In any event the name may be put aside for the present as indeterminable.

C. megalotus, on the other hand, agrees so closely in colour with the Colombian form, which is the only one that can be said to be "deep reddish yellow or fulvous, with an obscure (dorsal) band," that I think it advisable to identify it with that animal. An example from Medellin agrees best with the description, but other specimens from Costa Rica (*Salvin*), Valdivia, Colombia (*Pratt*), and Santa Marta (*Engelke*) cannot be distinguished from it. The dorsal stripe is some-

* Säug. i. pl. xlii. (1774).
† *Viverra caudivolvula*, op. cit. iii. p. 453, pl. cxxv. B (1777).
‡ P. Z. S. 1836, p. 81.

times absent or faint and sometimes distinct, but the strong general colour is common to all the specimens.

The following are more detailed descriptions of the new subspecies:—

Potos flavus aztecus.

Size large. General colour greyish yellow, between tawny olive and clay-colour of Ridgway. Muzzle dark brown, the brown surrounding the eyes. Crown like body. Ears large, well haired, their backs concolorous with head. No trace of a dorsal streak. Under surface and inner sides of limbs deep fulvous yellow, a darker streak present on the abdomen. Hands and feet darkening to brown on the digits. Tail proximally like body, rather lighter below, and darkening terminally to brown.

Dimensions of the type (approximate), taken on the dried skin:—

Head and body (apparently stretched) 580 millim.; tail 435; hind foot, s. u. (c.) 94, c. u. 100; ear 38.

Skull (see below).

Hab. of type. Atoyac, Vera Cruz. Other specimens from Michoacan (Mexican Museum) and Vera Paz, Guatemala (*Salvin*).

Type. Old male. B.M. no. 88. 8. 8. 1. Collected May 1888 by Mr. H. H. Smith, and presented by Messrs. F. D. Godman and O. Salvin.

Potos flavus meridensis.

Colour very much as in a Demeraran specimen of true *flavus*, but size, as judged from skull, markedly less. General colour more yellowish than in *C. f. aztecus*, the fore-quarters and hips especially suffused with yellow. Muzzle but little darker, rings round eyes comparatively narrow. Ears large, well-haired, their backs rather browner than the head. Back with a distinct dorsal stripe commencing on the withers and ending on the rump. Under surface and inner side of limbs bright buffy yellow. Upper surface of hands and feet deep yellow, the digits also yellow, not brown. Tail above greyish yellow, darkening terminally to brown; beneath yellow to end.

Skull smaller and lighter throughout and with smaller teeth than in *P. flavus*, the length of the cheek tooth-series particularly small (see below).

Dimensions of the type (measured in the flesh by collector) :—

Head and body 440 millim.; tail 400; hind foot, s. u. 78, c. u. 84; ear 30.

Hab. Sierra Nevada, Merida, Venezuela. Altitude 2500 m.

Type. Old female. B.M. no. 98. 7. 1. 7. Collected 30th November, 1896, by S. Briceño, and presented by Oldfield Thomas.

This is evidently a mountain race of the typical *flavus*, which it resembles in colour but does not equal in size.

Potos flavus modestus.

Size markedly smaller and form more squat than in all other subspecies except *P. f. meridensis*; the tail also (unless imperfect in both specimens) conspicuously shorter than usual. Fur comparatively short and close, about 11 millim. long on the back. General colour dark, about as in *P. f. megalotus*. Muzzle and orbital area brown. Head rather darker than back, owing to the numerous brown tips to the longer hairs. Ears of medium size, well-haired, their backs brown, darker than the general colour. Median line of back with a well-marked dark line commencing behind the shoulders, interrupted on the rump, indistinctly present on the base of the tail. Under surface dull yellowish, the chest and usual abdominal line deep suffused orange. Limbs like body, darkening to brown on the digits. Tail very short, dull clay-colour proximally, darkening to brown terminally.

Dimensions (approximate) of the type (measured in skin) :—

Head and body 375 millim.; tail 240 (280 in the second specimen); hind foot, s. u. 80, c. u. 87; ear 32.

Skull (see below).

Hab. Balzar Mountains, Guayas Province, W. Ecuador.

Type. Old female. B.M. no. 80. 5. 6. 79. Collected by Mr. Illingworth. Two specimens, male and female.

These specimens are those referred to in my paper on Ecuadorean mammals in 1880*. None like them have turned up since, but an extended knowledge of the group emphasizes their distinctness. Their small size (the male skull is of exactly the same size as the female), short tail, dark colour, and brown ears readily distinguish them from any of their allies. As regards the shortness of the tails, the terminal darkening shows that, if at all, they cannot be very imperfect.

* P. Z. S. 1880, p. 400.

Skull-dimensions :—

Subspecies..	*azteeus.*	*megalotus.*	*meridensis.*	*flavus.*	*modestus.*
Sex	♂.	♂.	♀.	♀.	♀.
Specimen ..	Type.	73.2.24.5.	Type.	97.7.24.1.	Type.
Greatest length.....	94	91	..	94	87·5
Basal length	83	..	74	82	77·5
Zygomatic breadth ..	66	56	54	63	57
Interorbital breadth..	22·5	19	19·3	20	19·3
Breadth of brain-case.	44	39	39·5	40	38
Palate length	40	40	35	41	37
Combined length of:					
five upper cheek teeth	21·6	20	18	21·3	18·5
„ lower „	24	23	20	24·3	21·7
upper molars	14	13	12	13·3	12
lower molars	16·3	15·3	14·7	16	14·7
Height of lower jaw..	46·7	41	40	43·3	40

XLIV.—*On a new Species of* Atherura *discovered by Capt. Guy Burrows on the Congo.* By Oldfield Thomas.

The British Museum owes to the generosity of Capt. Guy Burrows, late Commissioner of the Aruwimi district of the Congo, the skeleton of an *Atherura* obviously different from any described species. The skin has unfortunately been lost; but in this group the characters of the skull afford the chief distinguishing marks, and I have therefore no hesitation in describing the species as new. It may be called

Atherura Burrowsi, sp. n.

Size even less than in *A. centralis*, Thos., of Monbuttu *, itself distinguished from the West-African *A. africana* by its smaller size and less inflated skull. Nasals very small, short, narrow, parallel-sided. Frontal region not inflated at all, scarcely concave medially. Supraorbital edges rounded, parallel, without postorbital projections. Interparietal large, projecting far forward, so that the median parietal suture is only about one third the length of the antero-posterior diameter of the interparietal; in *A. africana* and *centralis* the two measurements are about equal. A vacuity present in the middle line of the palate halfway between the palatal foramina and the premolars. Middle line of palate not raised up into a central ridge, and the basioccipital equally smooth.

Milk-premolar still in place, but the last molar up and

* Ann. & Mag. Nat. Hist. (6) xv. p. 88 (1895).